

WHAT IS CLAIMED IS:

1. A scanning system supporting platen and sheet-fed scanning of documents comprising:
 - a first scanning unit with a first enclosure housing a first set of mechanisms for sheet-fed scanning functions, said first scanning unit further comprising a tether interface; and
 - a second scanning unit with a second enclosure attached to said first scanning unit through said tether interface and including a second set of mechanisms for platen scanning of documents in operable combination with said first scanning unit.
2. The scanning system of claim 1 wherein a plurality of digital scanning devices are attached to said first scanning unit through said tether interface.
3. The scanning system of claim 2 wherein a plurality of digital scanning devices are connected to said first scanning unit through said tether interface for scanning checks or tickets in combination with the first scanning unit.
4. The scanning system of claim 3 wherein said plurality of digital scanning devices comprise at least one digital camera for capturing digital photographs.
5. The scanning system of claim 1 wherein a unit control and image processing electronics contained in said first scanning unit handle data control and camera movement for both said first scanning unit and said second scanning unit.

6. The scanning system of claim 1 wherein said first scanning unit and said second scanning unit share a common host address.

7. The scanning system of claim 1 wherein a third scanning unit with a third enclosure are attached to said first scanning unit through said tether interface.

8. The scanning system of claim 1 wherein said tether interface is an electronic cable.

9. The scanning system of claim 1 wherein said tether interface is a radio frequency link.

10. The scanning system of claim 1 wherein said tether interface is a fiber optic cable.

11. The scanning system of claim 1 wherein said tether interface is an infrared link.

12. The scanning system of claim 1 wherein said first set of mechanisms of said first scanning unit comprise:

a feeder opening through which paper documents are fed into said first scanning unit;

an exit opening adapted to output scanned documents from said first scanning unit;

a paper pathway extending from said feeder opening to said exit opening; and

a first image-forming subsystem disposed within said first scanning unit for scanning images appearing on documents fed through said feeder opening.

13. The scanning system of claim 12 wherein said first image-forming subsystem comprises a camera.

14. The scanning system of claim 12 further comprising a feed roller disposed about said feeder opening and adapted to facilitate the introduction of said documents into said first paper pathway.

15. The scanning system of claim 14 further comprising a separation roller disposed adjacent to said feed roller and adapted to ensure that only a single sheet of paper is fed through said feeder opening during at any one time.

16. The scanning system of claim 12 further comprising a plurality of rollers disposed about said paper pathway and configured for facilitating the transmission of paper documents from said feeder opening to said exit opening.

17. The scanning system of claim 12 wherein said first image-forming sub-system comprises:

a lens;

a light source disposed about said first paper pathway for directing light into paper documents entering said first scanning unit through said feeder opening;

reflection means disposed for guiding reflected light from said paper documents to said lens; and

a camera for capturing an image of said reflective light.

18. The scanning system of claim 17 wherein said reflection means comprises mirrors.

19. The scanning system of claim 1 wherein said second enclosure of said second scanning unit further comprises a substantially flat upper surface.

20. The scanning system of claim 19 wherein said second enclosure further comprising a glass top fixed to said upper surface and providing a platform upon which documents can be placed.

21. The scanning system of claim 20 further comprising:
a lid for covering documents placed on said glass top; and
a hinging means coupling one end of said lid.

22. A modular scanner comprising:
a first enclosure with a first stationary camera therein, said first enclosure having a first opening for feeding a document to be scanned, a second opening for delivering a scanned document to a user;
a first pathway extending between said first opening and said second opening within said first enclosure;
document handling means within said first enclosure adapted for receiving said document through said first opening and transporting said document via said first paper pathway to an area within said first enclosure where said first stationary camera scans said document;
a light source for delivering light energy to said document;
a light guiding means for directing reflected light energy from said document to said first stationary camera;
a second enclosure having a substantially flat top surface with a glass top thereon;
a moveable camera for scanning documents on said glass top;

translation means within said second enclosure for moving said movable camera along an axis substantially parallel to said glass top; and wherein said translation means receives a drive signal from said first enclosure.

23. The modular scanner of claim 22 wherein a second stationary camera mounted within said first enclosure.

24. The modular scanner of claim 23 wherein said second stationary camera is adjacent to said first stationary camera.

25. The modular scanner of claim 22 wherein said light guiding means comprises mirrors within said first enclosure adapted to direct light energy to a lens of said stationary camera.

26. The modular scanner of claim 22 further comprising:
a lid for covering documents placed on said glass top; and
hinging means coupling said lid to said flat-top surface.

27. The modular scanner of claim 22 wherein said translation means comprises a pulley and belt system adapted to engage said movable camera in said second enclosure for effecting platen scanning of documents placed on said glass top.

28. The modular scanner of claim 22 wherein said first enclosure further comprises a hatch configured to permit a user to clear a paper jam from said paper pathway.

29. The modular scanner of claim 22 wherein raw image data from said movable camera is transmitted to said first enclosure by a tether.

30. The modular scanner of claim 29 wherein raw image data from said second enclosure is processed in said first enclosure.

31. The modular scanner of claim 22 wherein power to said second enclosure is provided from said first enclosure by a tether.

32. The modular scanner of claim 22 wherein finished image files are transmitted by said first enclosure to a host computer for documents scanned both by said first enclosure and said second enclosure.

33. A detachable platen scanner for a scanning system supporting platen and sheet-fed scanning of documents comprising:

an enclosure having a substantially flat top surface with a glass top attached thereon;

a camera sub-assembly;

translations means within said enclosure adapted for moving said camera sub-assembly in a direction permitting scanning of documents placed on said glass top;

wherein drive signals for said translation means are received from a separate scanning unit; and

wherein raw image data from said camera sub-assembly is transmitted to said separate scanning unit for processing.

34. The detachable platen scanner of claim 33 further comprising:

a lid for covering documents placed on said glass top; and
hinging means coupling said lid to said enclosure.

35. The detachable platen scanner of claim 33 wherein said translation means comprises a pulley and belt system for moving said camera sub-assembly for effecting platen scanning of documents placed on said glass top.

36. The detachable platen scanner of claim 33 wherein said enclosure further comprises a rod engaged with said camera sub-assembly for moving said camera sub-assembly.

37. An airport security system comprising:
a scanner for scanning documents relating to a passenger;
a digital camera which captures a digital image of said passenger; and
wherein said scanner prepares a composite image comprised of a scanned image of said document and said digital image of said passenger.

38. The airport security system as in claim 37 wherein said composite image is transmitted to a host computer for storage.

39. The airport security system as in claim 37 wherein a host computer cross-checks said image of said passenger against law enforcement agency files.

40. The airport security system as in claim 37 wherein a host computer cross-checks information in said scanned document against law enforcement agency files.

41. An airport security system as in claim 37 wherein said digital camera transmits information to said scanner by a tether.

42. An airport security system as in claim 37 wherein additional scanners at other gates and additional digital cameras at other gates transmit information on other passengers to said scanner in the form of raw image data for processing.

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